EXPRESSION OF BIOLOGICALLY ACTIVE POLYPEPTIDES IN DUCKWEED

ABSTRACT OF THE DISCLOSURE

Methods, nucleic acid sequences, and transformed duckweed plant or duckweed nodule cultures for the expression and the secretion of biologically active polypeptides from genetically engineered duckweed are provided. Expression of recombinant polypeptides in duckweed is improved by modifying the nucleotide sequence of the expression cassette encoding the polypeptide for improved expression in duckweed.

Recovery of biologically active polypeptides from duckweed is improved by linking the biologically active polypeptide to a signal peptide that directs the secretion of the polypeptide into the culture medium.